

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Union Carbide Corporation Bayer Crop November 20, 2014
Science Facility Human Health Risk
Assessment (HHRA) for Surface Soil dated
March 2013

FROM: Debra Forman, Toxicologist
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Office of Technical and Administrative Support

TO: William Wentworth, RPM
Office of Remediation

This risk assessment has been reviewed, and comments are as follows.

Section 9, Human Health Risk Summary

- a) This section states "It was assumed that potential direct contact exposures by current/future receptors to subsurface media (soil and groundwater where it may be encountered) will be managed through a site materials management document." The materials management plan is an unacceptable approach because it is completely unenforceable. Subsurface work could be done at the Bayer Crop Science facility at any time with no risk mitigation, and with no knowledge of by either WVDEP or EPA. Furthermore, since there are no subsurface soil results on which to base risk mitigation, it is unclear how proper risk mitigation methods (as part of the materials management plan) could be known and used. Therefore, the HHRA remains incomplete, since subsurface data has not been assessed.
- b) Regarding the elevated naphthalene results driving an unacceptable hazard index in Exposure Unit 7, this section states that the concentrations exceeding the industrial RSL are localized and do not reflect potential risks from exposures to soil across the entire exposure unit. However, the localized nature of the elevated naphthalene results is not defined laterally, since there were no samples collected to the north, east, or past the western boundary of Exposure Unit 7. Please submit a technical memorandum proposing additional sampling to define the lateral extent of elevated naphthalene in soil.



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